



## **DEPARTMENT OF COMMERCE**

### **National Institute of Standards and Technology**

**[Docket Number: 211116-0234]**

#### **Study to Advance a More Productive Tech Economy**

**AGENCY:** National Institute of Standards and Technology (NIST), Commerce.

**ACTION:** Notice; request for information.

**SUMMARY:** The National Institute of Standards and Technology (NIST) is seeking information about the public and private sector marketplace trends, supply chain risks, legislative, policy, and the future investment needs of eight emerging technology areas, including: Artificial Intelligence, Internet of Things in Manufacturing, Quantum Computing, Blockchain Technology, New and Advanced Materials, Unmanned Delivery Services, Internet of Things, and Three-dimensional Printing. This Request for Information (RFI) is seeking comments to help identify, understand, refine, and guide the development of the current and future state of technology in the eight emerging technology areas named above. The information will inform a final report that will be submitted to Congress.

**DATES:** Comments in response to this notice must be received by 5:00 p.m. Eastern time on January 31, 2022. Submissions received after that date may not be considered.

Comments may be submitted by any of the following methods:

Electronic submission: Submit electronic public comments via the Federal e-Rulemaking Portal.

1. Go to [www.regulations.gov](https://www.regulations.gov) and enter NIST-2021-0007 in the search field,
2. Click the “Comment Now!” icon, complete the required fields, and
3. Enter or attach your comments.

Electronic submissions may also be sent as an attachment to [acastudy@nist.gov](mailto:acastudy@nist.gov) and may be in any of the following unlocked formats: Word or PDF. Please cite “COMPETE ACT” and the topic area in all correspondence. If the input is provided for more than one topic area, please submit separate documents for each topic area. Comments received by the deadline may be posted at [www.regulations.gov](http://www.regulations.gov). Comments containing references, studies, research, and other empirical data that are not widely published should include copies of the referenced materials. All submissions, including attachments and other supporting materials, may become part of the public record and may be subject to public disclosure. NIST reserves the right to publish relevant comments publicly, unedited and in their entirety. Personal information, such as account numbers or Social Security numbers, or names of other individuals, should not be included. Do not submit confidential business information, or otherwise sensitive or protected information. Comments that contain profanity, vulgarity, threats, or other inappropriate language or content will not be considered.

**FOR FURTHER INFORMATION CONTACT:** For questions about this RFI contact: Charles H. Romine, U.S. Department of Commerce, (301) 975-2900 or [Charles.Romine@nist.gov](mailto:Charles.Romine@nist.gov).

Please direct media inquiries to NIST's Public Affairs Office at (301) 975-2762 or [Jennifer.Huergo@nist.gov](mailto:Jennifer.Huergo@nist.gov).

**SUPPLEMENTARY INFORMATION:** Under DIVISION FF, Title XV, §1501 of the Consolidated Appropriations Act, 2021 (Public Law 116-260), the Secretary of Commerce, in coordination with the Federal Trade Commission and other federal agencies, is directed to complete a study of and issue a report on eight emerging technology areas:

- Artificial Intelligence - on the state of the artificial intelligence industry and the impact of such industry on the United States economy,

- Internet of Things in Manufacturing - on the use of internet-connected devices and internet-connected solutions in manufacturing in the United States,
- Quantum Computing - on the state of the quantum computing industry and the impact of such industry on the United States economy,
- Blockchain Technology - on the state of the blockchain technology industry and the impact of such industry on the United States economy,
- New and Advanced Materials - on the state of the new and advanced materials industry, including synthetically derived materials or those with enhanced natural properties, and the impact of such industry on the United States economy,
- Unmanned Delivery Services (both air & ground) - on the impact of unmanned delivery services on businesses conducting interstate commerce and the impact of such industry on the United States economy, rules and regulations,
- Internet of Things - on the state of the internet-connected devices industry and the impact of such industry on the United States economy, and
- Three-dimensional Printing - on the state of the three-dimensional printing industry and the impact of such industry on the United States economy.

NIST invites stakeholders throughout the scientific research, standards, advocacy, industry, and non-scientific communities, including the general public, to provide input for creating a forward-thinking approach that supports emerging technology to foster economic growth and competitiveness across the Nation in ways that benefit all Americans. NIST will develop the report in a manner consistent with its mission to promote U.S. innovation and industrial competitiveness.

## **Request for Information**

The following list of topics covers the major areas about which NIST seeks information. The listed areas are not intended to limit the topics that may be addressed by respondents so long as they address the current and future issues within one or more emerging technology areas. For each emerging technology area, NIST seeks information related to: the relevant marketplaces; supply chains; legislative, policy and standards needs; and strategic public-private partnerships to enhance adoption:

*Technology Development*

- NIST seeks to gain greater awareness of the federal agencies that have jurisdiction over the emerging technology area, or with which industry interacts on issues related to the emerging technology areas.
- NIST seeks information on what the federal government could do to foster or enhance the adoption of technology or help expand economic opportunities within the emerging technology areas.
- NIST seeks to better understand the current and future needs, as well as risks, for standards development in the emerging technology areas.
- NIST seeks information on existing standards forums in the emerging technology areas.
- NIST seeks to better understand the needs of industry in future public-private investment partnerships to foster innovation in the emerging technology areas.
- NIST seeks information on how existing legislation and/or regulations may help or hinder the maturation of the emerging technology areas in the marketplace, and any areas where new legislation and/or regulations are needed to advance the emerging technology areas in the marketplace.

*Technology Applications & Utilization:*

- NIST seeks to gain greater awareness of industry's utilization of the emerging

technology areas.

- NIST seeks information on strengthening regional innovation centers across the United States.
- NIST seeks information regarding the current marketplace landscape and projected changes to the marketplace with the adoption of the emerging technology areas.
- NIST seeks information on risks and long-term trends in the marketplace for the emerging technology areas.
- NIST seeks information on risks and long-term trends in supply chains within the emerging technology areas.
- NIST seeks information about how organizations identify and assess risks posed to supply chains within the emerging technology areas.
- NIST seeks information regarding foreign capability and capacity within the emerging technology areas.

**Alicia Chambers,**

*NIST Executive Secretariat.*

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